

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

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PATENT NO. : 7,534,271  
APPLICATION NO.: 10/763,314  
ISSUE DATE : May 19, 2009  
INVENTOR(S) : Michael Ries, Wade Fallin, Daniel F. Justin, Mark A. Munt

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 12, line 54, insert the following 16 claims:

21. A prosthesis adapted for implantation against a resected surface on a proximal end of a femur and inside of a cavity of the femur, comprising:

a femoral head component comprising an external bearing surface; and

a femoral stem component comprising:

a neck portion shaped to extend substantially outside the cavity of the femur, the neck portion having a proximal portion, engagable with the femoral head component, and a distal neck body;

a flange portion medially and distally projecting from the neck body, the flange portion comprising a bottom surface;

an elongated stem portion shaped to extend substantially inside the cavity of the femur and extending distally from the neck body and having a longitudinal axis oriented at an acute angle from the bottom surface of the flange portion;

wherein, distally of a medial tip of the flange, each cross sectional shape along substantially an entire length of the elongated stem portion is substantially radially symmetrical.

22. A prosthesis as in claim 21, wherein, distally of a medial juncture of the neck portion with the flange, each cross sectional shape along substantially the entire length of the elongated stem portion is substantially radially symmetrical.

23. A prosthesis as in claim 21, wherein each cross sectional shape is selected from the group consisting of a circle, a rectangle, a triangle, a hexagon, and a star shape.

24. A prosthesis as in claim 21, wherein the elongated stem portion comprises a proximal section having a substantially circular shape, and a distal section having a non-circular cross sectional shape.

25. A prosthesis as in claim 21, wherein, distally of a medial tip of the flange, substantially an entire length of the elongated stem portion is circumscribed by a substantially cylindrical shape.

26. A prosthesis as in claim 25, wherein, distally of a medial tip of the flange, any two maximum cross sectional widths of the elongated stem portion, measured perpendicular to the longitudinal axis, do not differ by more than ten percent.

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27. A prosthesis as in claim 21, wherein the femoral stem component further comprises a transitional body region adjacent to the bottom surface of the flange portion, wherein the transitional body region is shaped to provide a lateral offset between an axis of the neck portion and the longitudinal axis of the elongated stem portion.

28. A prosthesis adapted for implantation against a resected surface on a proximal end of a femur and inside of a cavity of the femur, comprising:

a femoral head component comprising an external bearing surface; and

a femoral stem component comprising:

a neck portion shaped to extend substantially outside the cavity of the femur, the neck portion having a proximal portion, engagable with the femoral head component, and a distal neck body;

a flange portion medially and distally projecting from the neck body, the flange portion comprising a bottom surface;

an elongated stem portion shaped to extend substantially inside the cavity of the femur and extending distally from the neck body and having a longitudinal axis oriented at an acute angle from the bottom surface of the flange portion;

wherein, distally of a medial tip of the flange, substantially an entire length of the elongated stem portion is circumscribed by a substantially cylindrical shape.

29. A prosthesis as in claim 28, wherein, distally of a medial juncture of the neck portion with the flange, substantially the entire length of the elongated stem portion is circumscribed by the substantially cylindrical shape.

30. A prosthesis as in claim 28, wherein the elongated stem portion comprises a proximal section having a substantially circular shape, and a distal section having a non-circular cross sectional shape.

31. A prosthesis as in claim 28, wherein, distally of a medial tip of the flange, any two maximum cross sectional widths of the elongated stem portion, measured perpendicular to the longitudinal axis, do not differ by more than ten percent.

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32. A prosthesis as in claim 28, wherein the femoral stem component further comprises a transitional body region adjacent to the bottom surface of the flange portion, wherein the transitional body region is shaped to provide a lateral offset between an axis of the neck portion and the longitudinal axis of the elongated stem portion.

33. A prosthesis adapted for implantation against a resected surface on a proximal end of a femur and inside of a cavity of the femur, comprising:

a femoral head component comprising an external bearing surface; and

a femoral stem component comprising:

a neck portion shaped to extend substantially outside the cavity of the femur, the neck portion having a proximal portion, engagable with the femoral head component, and a distal neck body;

a flange portion medially and distally projecting from the neck body, the flange portion comprising a bottom surface;

an elongated stem portion shaped to extend substantially inside the cavity of the femur and extending distally from the neck body and having a longitudinal axis oriented at an acute angle from the bottom surface of the flange portion;

wherein, distally of a medial tip of the flange, any two maximum cross sectional widths of the elongated stem portion, measured perpendicular to the longitudinal axis, do not differ by more than ten percent.

34. A prosthesis as in claim 33, wherein, distally of a medial juncture of the neck portion with the flange, any two maximum cross sectional widths of the elongated stem portion, measured perpendicular to the longitudinal axis, do not differ by more than ten percent.

35. A prosthesis as in claim 33, wherein the elongated stem portion comprises a proximal section having a substantially circular shape, and a distal section having a non-circular cross sectional shape.

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36. A prosthesis as in claim 33, wherein the femoral stem component further comprises a transitional body region adjacent to the bottom surface of the flange portion, wherein the transitional body region is shaped to provide a lateral offset between an axis of the neck portion and the longitudinal axis of the elongated stem portion.

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